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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	:	Customer Number: 46322
	:	
William DA PALMA et al.	:	Confirmation Number: 1522
	:	
Application No.: 10/734,866	:	Group Art Unit: 2626
	:	
Filed: December 12, 2003	:	Examiner: M. Colucci
	:	

For: A RUN-TIME SIMULATION ENVIRONMENT FOR VOICEXML APPLICATION
        THAT SIMULATES AND AUTOMATES USER INTERACTION

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed October 15, 2009,

wherein Appellants appeal from the Examiner's rejection of claims 1, 8, 15, and 21-37.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on December

12, 2003, at Reel 014799, Frame 0625.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1, 8, 15, and 21-37 are pending and three-times rejected in this Application. Claims 2-7, 9-14, and 16-20 have been cancelled. It is from the multiple rejections of claims 1, 8, 15, and 21-37 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Third and Final Office Action dated July 15, 2009 (hereinafter the Third Office Action).

V. SUMMARY OF CLAIMED SUBJECT MATTER

1   Referring to Figure 3 and also to independent claim 1, a computer-implemented method

2   for simulating a run-time user interaction with a voice application is disclosed. In block 305, a

3   user simulation script, programmed to specify simulated voice interactions with the voice

4   application, is loaded (lines 2-4 of paragraph [0020]). A nominal output of the voice application

5   is derived from the voice application (lines 3-5 of paragraph [0021]). In blocks 315/325, the user

6   simulation script is processed to generate both a simulated output for the voice application

7   corresponding to the nominal output (block 315; lines 5-8 of paragraph [0021]) and a simulated

8   input for the voice application corresponding to a pre-determined user input to the voice

9   application (block 325; lines 2-4 of paragraph [0022]).

10   Referring to Figure 3 and also to independent claim 8, a computer-readable medium

11   having stored thereon a computer program for simulating a run-time user interaction with a voice

12   application is disclosed. The computer program comprises a routine set of instructions which

13   when executed by a computer cause the computer to perform the following steps. In block 305,

1   a user simulation script, programmed to specify simulated voice interactions with the voice

2   application, is loaded (lines 2-4 of paragraph [0020]). A nominal output of the voice application

3   is derived from the voice application (lines 3-5 of paragraph [0021]). In blocks 315/325, the user

4   simulation script is processed to generate both a simulated output for the voice application

5   corresponding to the nominal output (block 315; lines 5-8 of paragraph [0021]) and a simulated

6   input for the voice application corresponding to a pre-determined user input to the voice

7   application (block 325; lines 2-4 of paragraph [0022]).

8   Referring to Figure 2 and also to independent claim 15, a computer-implemented

9   simulation tool system 200 for simulating a run-time user interaction with a voice application

10   201 running on an application server is disclosed (lines 1-4 of paragraph [0017]) The tool

11   system is configured to load a user simulation script 205 programmed to specify simulated voice

12   interactions with the voice application 201 (lines 5-6 of paragraph [0017]). The simulation tool

13   system 200 comprises a voice application processing module 202 and a user simulation script

14   processing module 210. The voice application processing module 202 processes the voice

15   application 201 to derive a nominal output of the voice application 201 (lines 3-5 of paragraph

16   [0017]). The user simulation script processing module 210 processes the user simulation script

17   205 to generate a simulated output for the voice application 201 corresponding to the nominal

18   output, and to generate a simulated input for the voice application 201 corresponding to a pre-

19   determined user input to the voice application 201 (lines 1-9 of paragraph [0019]).

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

</div>

1. Claims 1, 8, 15, and 21-37 were rejected under 35 U.S.C. § 103 for obviousness based

upon Williams et al., U.S. Patent Publication No. 2003/0212561 (hereinafter Williams), in view

of Koehler et al., U.S. Patent Publication No. 2003/0156706 (hereinafter Koehler).

VII. ARGUMENT

1   **THE REJECTION OF CLAIMS 1, 8, 15, AND 21-37 UNDER 35 U.S.C. § 103 FOR**

2   **OBVIOUSNESS BASED UPON WILLIAMS IN VIEW OF KOEHLER**

3   For convenience of the Honorable Board in addressing the rejections, claims 8, 15, and

4   21-37 stand or fall together with independent claim 1.

5

6   As is evident from Appellants' previously-presented comments during prosecution of the

7   present Application and from Appellants' comments below, there are questions as to how the

8   limitations in the claims correspond to features in the applied prior art. In this regard, reference

9   is made to M.P.E.P. § 1207.02, entitled "Contents of Examiner's Answer." Specifically, the

10   following is stated:

11   (A) CONTENT REQUIREMENTS FOR EXAMINER'S ANSWER. The examiner's
12   answer is <u>required to include</u>, under appropriate headings, in the order indicated, the following
13   items:
14   ...
15   (9)(e) For each rejection under 35 U.S.C. 102 or 103 where there are questions
16   as to how limitations in the claims correspond to features in the prior art even after the
17   examiner complies with the requirements of paragraphs (c) and (d) of this section, the
18   examiner <u>must</u> compare at least one of the rejected claims <u>feature by feature</u> with the
19   prior art relied on in the rejection. The comparison <u>must</u> align the language of the claim
20   side-by-side with a reference to the specific page, line number, drawing reference
21   number, and quotation from the prior art, as appropriate. (emphasis added)
22
23   Therefore, if the Examiner is to maintain the present rejections and intends to file an Examiner's

24   Answer, the Examiner is required to include the aforementioned section in the Examiner's

25   Answer.

26

27   On October 10, 2007, the Patent Office issued the "Examination Guidelines for

28   Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in KSR

29   International Co. v. Teleflex Inc.," 72 Fed. Reg. 57,526 (2007) (hereinafter the Examination

1 Guidelines). Section III is entitled "Rationales To Support Rejections Under 35 U.S.C. 103."

2 Within this section is the following quote from the Supreme Court: "rejections on obviousness

3 grounds cannot be sustained by merely conclusory statements; instead there must be some

4 articulated reasoning with some rational underpinning to support the legal conclusion of

5 obviousness." KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007) (quoting In re Kahn,

6 441 F.3d 977, 988 (Fed. Cir. 2006)).

7

8 Referring to the first column on page 57,529 of the Examination Guidelines for

9 Determining Obviousness, the following is a list of rationales that may be used to support a

10 finding of obviousness under 35 U.S.C. § 103:

11 (A) Combining prior art elements according to known methods to yield
12 predictable results;

13 (B) Simple substitution of one known element for another to obtain
14 predictable results;

15 (C) Use of known technique to improve similar devices (methods, or
16 products) in the same way;

17 (D) Applying a known technique to a known device (method, or product)
18 ready for improvement to yield predictable results;

19 (E) "Obvious to try" - choosing from a finite number of identified,
20 predictable solutions, with a reasonable expectation of success;

21 (F) Known work in one field of endeavor may prompt variations of it for
22 use in either the same field or a different one based on design incentives or other
23 market forces if the variations would have been predictable to one of ordinary
24 skill in the art;

25 (G) Some teaching, suggestion, or motivation in the prior art that would
26 have led one of ordinary skill to modify the prior art reference or to combine prior
27 art reference teachings to arrive at the claimed invention.

28

1   Upon reviewing the Examiner's analysis on pages 10 and 11 of the Third Office Action, the

2   Examiner appears to be employing rationale (G). However, the Examiner's analysis is not

3   entirely clear as to what rationale the Examiner is employing. As such, Appellants request that

4   the Examiner <u>clearly identify</u> the rationale, as described in the Examination Guidelines for

5   Determining Obviousness, being employed by the Examiner in rejecting the claims under 35

6   U.S.C. § 103.

7

8   Referring again to rationale (G), as discussed on page 57,534 of the Examination

9   Guidelines, the following findings of fact <u>must</u> be articulated by the Examiner:

10   (1) a finding that there was some teaching, suggestion, or motivation,

11   either in the references themselves or in the knowledge generally available to one

12   of ordinary skill in the art, to modify the reference or to combine reference

13   teachings;

14   (2) a finding that there was reasonable expectation of success; and

15   (3) whatever additional findings based on the Graham factual inquiries

16   may be necessary, in view of the facts of the case under consideration, to explain

17   a conclusion of obviousness.

18

19   Referring to the paragraph entitled "Office Personnel as Factfinders" on page 57,527 of

20   the Examination guidelines, the following was stated:

21   Office personnel fulfill the critical role of factfinder when resolving the

22   *Graham* inquiries. It must be remembered that while the ultimate determination of

23   obviousness is a legal conclusion, the underlying *Graham* inquiries are factual.

24   When making an obviousness rejection, Office personnel must therefore ensure

25   that the written record includes findings of fact concerning the state of the art and

26   the teachings of the references applied. In certain circumstances, it may also be

27   important to include explicit findings as to how a person of ordinary skill would

1   have understood prior art teachings, or what a person of ordinary skill would have

2   known or could have done. Factual findings made by Office personnel are the

3   necessary underpinnings to establish obviousness.

4

5   In Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court set

6 forth the factual inquiries that are to be applied when establishing a background for determining

7 obviousness under 35 U.S.C. 103. These factual inquiries are summarized as follows:

8   (A) Determine the scope and content of the prior art;

9   (B) Ascertain the differences between the prior art and the claims at issue;

10   (C) Resolve the level of ordinary skill in the pertinent art; and

11   (D) Evaluate any indicia of nonobviousness.

12

13 However, in order to make a proper comparison between the claimed invention and the prior art,

14 the language of the claims must first be properly construed. See In re Paulsen, 30 F.3d 1475,

15 1479 (Fed. Cir. 1994). See also, Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68

16 (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question,

17 "what is the invention claimed?" since "[c]laim interpretation, ... will normally control the

18 remainder of the decisional process.") See Gechter v. Davidson, 116 F.3d 1454, 1460 (Fed. Cir.

19 1997) (requiring explicit claim construction as to any terms in dispute).

20

21   Upon reviewing the Examiner's analysis in view of the requirements discussed above

22 necessary for the Examiner to establish a prima facie case of obviousness, Appellants recognize

23 numerous deficiencies in the Examiner's analysis.

24

_____

25

1   <u>Non-analogous prior art</u>

2   Whether a prior art reference is from a nonanalogous art involves (a) determining

3 whether the reference is within the same field of endeavor and (b) determining whether the

4 reference is reasonably pertinent to a known problem in the art. <u>In re Clay</u>, 23 USPQ2d 1058

5 (Fed Cir. 1992). If the prior art is outside the inventor's field of endeavor, the inventor will only

6 be presumed to have knowledge of prior art that is reasonably pertinent to a known need or

7 problem in the field of endeavor. <u>KSR International Co. v. Teleflex Inc.</u>, 550 U.S. 398, ___, 82

8 USPQ2d 1385, 1397 (2007). The Examiner is also charged to consider "'the reality of the

9 circumstances' … in other words, common sense" to determine what field a person of ordinary

10 skill in the art would reasonably be expected to look. <u>In re Oetiker</u>, 977 F.2d 1443, 24 USPQ2d

11 1443 (Fed. Cir. 1992).

12

13   Koehler is directed to a training tool for training call center agents based on an interaction

14 with simulated customers. On the contrary, the teachings of both the claimed invention and

15 Williams are directed to a testing system that removes human interaction. In this regard, Appellants

16 respectfully submit that Koehler is non-analogous prior art that cannot be properly applied against

17 the claimed invention. Not only is Koehler not within the same field of endeavor as either the

18 claimed invention or Williams, the Examiner has failed to identify whether Koehler is reasonably

19 pertinent to a known need or problem in the field of endeavor. For example, the "progress report"

20 identified by the Examiner in the first full paragraph on page 4 of the First Office Action is related

21 to the human trainee. However, since human trainees are not part of the field of endeavor (i.e.,

22 automated device for test voice applications), the addition of a progress report does not solve any

23 known need or problem in the field of endeavor.

1

2   The above-reproduced arguments (incorporated herein) were previously presented on

3   page 6, line 4 through page 7, line 4 of the First Response dated November 26, 2008 (hereinafter

4   the First Response).   Referring to the paragraph spanning pages 2 and 3 of the Second Office

5   Action, in an apparent response to those arguments, the Examiner asserted the following:

6   Examiner takes the position that Williams and Koehler are both within the scope of the
7   present invention and directly teach methods in parallel with the present invention (present
8   invention [0021]) relevant to XML, voice applications, simulation and testing, and voice call
9   flows, wherein Williams in view of Koehler as a whole clearly appear to teach voice and text
10   equivalents of voice calls for predetermined and nominal output.
11
12   Appellants are unclear as to what the Examiner means when the "Examiner takes the position

13   that Williams and Koehler are both within the scope of the present invention and directly teach

14   methods in parallel with the present invention."   To assert that the prior art is within the scope of

15   the claimed invention is to assert that both references are anticipatory under 35 U.S.C. § 102.

16   However, this does not appear to be the Examiner's intent.

17

18   Alternatively, the Examiner could be asserting that Williams and Koehler are within the

19   same field of endeavor as the claimed invention.   However, the Examiner's analysis is akin to

20   asserting that motorcycles and automobiles are within the same field of endeavor because both

21   involve wheels, engines, and transmissions.   The fact that different fields of endeavor share

22   similar features does not make them from the same field of endeavor.   Regardless, the Examiner

23   did not explicitly refer to the same "field of endeavor."   As such, Appellants are unclear as to the

24   point attempted to be made by the Examiner.

25

26   The above-reproduced arguments (incorporated herein) were previously presented on page

27   10, line 9 through page 11, line 5 of the Second Response dated April 27, 2009 (hereinafter the

1   Second Response). Although the Examiner presented a substantial "Response to Arguments"

2   section on pages 2 8 of the Third Office Action, a response to Appellants' above-reproduced

3   arguments cannot be found within this section.

4

5   _____

6   <u>"nominal output" and "simulated output"/"simulated input"</u>

7   Independent claim 1 includes two references to the phrase "nominal output." These are

8   "deriving from the voice application a *nominal output* of the voice application" and "generate …

9   a simulated output for the voice application corresponding to the *nominal output*." Referring to

10   paragraph [0021] of Appellants' specification, the following was stated with regard to the phrase

11   "nominal output."

12   The voice application normally generates one or more outputs, which, in conventional
13   systems, may be prompts, synthesized text to speech, pre-recorded audio, and the like. However,
14   <u>in the simulation environment of the present invention, all such outputs are text based</u>, and are
15   initially "nominal" outputs: <u>the outputs that the voice application would otherwise provide to a</u>
16   <u>user in the non-simulated environment.</u> Within the simulation environment, the actual outputs for
17   the voice application are instead generated by the user simulation script, which generates a
18   simulated output for the voice application corresponding to the "nominal" output. This occurs in
19   step 315.
20
21   Thus, despite the Examiner's assertions to the contrary (see discussion on page 6 of the Third Office

22   Action), Appellants' use of the term is not "ambiguous."

23

24   In contrast to a "nominal output," which is the voice application would otherwise provide to

25   a user, a "simulated output" is an output in a simulation environment. Since, the actual output (i.e.,

26   nominal output) of a voice application would be a voice, the simulated output is text. Similarly,

27   since the actual input into a voice application is audio, the simulated input is also text.

28

29

10

1   <u>Examiner's characterization of the scope and content of Williams</u>

2   The Examiner's analysis regarding the teachings of Williams is ambiguous. In the third to

3   last paragraph on page 9 of the Third Office Action, the Examiner asserted the following regarding

4   the teachings of Williams:

5   <u>processing the user simulation script</u> ([0034]) <u>to generate both a simulated output for the</u>
6   <u>voice application corresponding to the nominal output</u> and a simulated input for the voice
7   application corresponding to a pre-determined user input ([0048]) <u>to the voice application</u> ([0047]
8   & Fig. 6).
9
10   However, the Examiner also states in the last full paragraph on page 9 and the first full paragraph

11   on page 10 of Third Office Action[1]:

12   However, Williams fails to teach deriving from the voice application a nominal output of
13   the voice application (emphasis added)
14   <u>processing the user simulation script to generate both a simulated output for the voice</u>
15   <u>application corresponding to the nominal output</u> and a simulated input deriving from the voice
16   application a nominal output of the voice application. (emphasis added)
17

18   Referring to the underlined portions of the two above-reproduced passages, these underlined

19   portions refer to identical language. Thus, on one hand, the Examiner is asserting that Williams

20   teaches the language at issue, yet on the other hand, the Examiner is admitting that Williams fails to

21   teach the limitations at issue. As noted by Appellants throughout the prosecution of the present

22   application, the Examiner's analysis, as to many aspects, is confusing and ambiguous.

23

24   Notwithstanding the Examiner's ambiguous analysis, it appears that the Examiner is

25   asserting, with regard to claim 1, that Williams teaches "loading a user simulation script

26   programmed to specify simulated voice interactions with the voice application" and "processing

27   the user simulation script to generate ... a simulated input for the voice application

28   corresponding to a pre-determined user input."

---

[1] Similar assertions were made by the Examiner on page 9 of the Second Office Action.

1

2   Therefore, based upon the Examiner's own analysis, a proper obviousness analysis would

3 identify that Williams fails to teach "processing the user simulation script to generate ... a

4 simulated output for the voice application corresponding to the nominal output" and that the user

5 simulation script is processed to generate both the simulated output for the voice application and

6 the simulated input."

7

8   Appellants, however disagree that Williams teaches "processing the user simulation script

9 to generate ... a simulated input for the voice application corresponding to a pre-determined user

10 input." The "simulated input" into the voice application described by Williams is not a simulated

11 input. Instead, referring to paragraph [0049] of Williams, the contact center 64 (which contains

12 the voice application) "receives the audio telephone signals generated by the virtual telephone

13 caller system 50." As discussed in paragraph [0047] of Williams, the virtual telephone caller

14 system 50, through the use of a script execution engine 58, "provides audio telephone signals to

15 the public switched telephone network (PSTN) 62 in response to the one or more test scripts."

16 Thus, Williams does not teach generating a *simulated* input for the voice application. Instead,

17 Williams teaches generating an *actual* input for the voice application.

18

19   In addition to the other limitations that Williams fails to teach, a proper obviousness

20 analysis would identify that Williams fails to teach "processing the user simulation script to

21 generate ... a simulated input for the voice application corresponding to a pre-determined user

22 input."

23

1   Examiner's characterization of the scope and content of Koehler

2   The Examiner's analysis regarding the teachings of Koehler is found on pages 10 and 11

3   of the Third Office Action. In the second full paragraph on page 10 of the Third Office Action,

4   the Examiner asserted the following:

5   Koehler teaches actual and simulated data outputs, wherein Koehler teaches that
6   simulator module 230 creates a realistic training environment in two respects. First, through the
7   business rules application 232, the simulator module 230 initiates a real-time, spoken conversation
8   and the software emulation 238 of the simulator module 230 is programmed to mimic the software
9   actually running a customer service center for which the trainee is training. For example, the
10   screenshots, caller data format, options, keyboard configuration and the like are identical to that of
11   the actual call center, so the trainee is trained on system operation at the same time the trainee is
12   learning to communicate with customers (Koehler [0044]). (emphasis added)
13
14   Notably, the Examiner's analysis recognizes that the simulator module 230 provides a "real-time

15   spoken conversation." Thus, what is being provided by the simulator module is actual input

16   corresponding to a pre-determined user input. Moreover, the "simulated" data output described

17   by Koehler does not refer to simulated data into a voice application. Instead, what is being

18   simulated/mimicked is "the software actually running a customer service center for which the

19   trainee is training." Thus, these teachings do not cure the argued deficiencies of Williams.

20

21   In the last full paragraph on page 10 of the Third Office Action, the Examiner further

22   asserted the following:

23   Further, Koehler demonstrates examples of both simulated and actual outputs in a voice
24   application, wherein the use of a "nominal" output is addressed in an example, wherein Koehler
25   teaches regional database may also include customer data, which likewise populates the software
26   emulation 238, so that the trainee receives "pop-up" caller data during simulated calls, as would be
27   the case in an actual call center interaction. The customer data includes, for example, the customer
28   name, address, account balance, current product/service information and the like. The customer
29   data may also be updated by a web interface. (Koehler [0049]). (emphasis added)
30
31   Referring to the underlined portion of the above-reproduced passage, what is being emulated (i.e.,

32   simulated) is the software (i.e., "the software actually running a customer service center for which

1   the trainee is training"). This software is not related to a voice application. Thus, like the

2   Examiner's prior cited passage, these teachings do not cure the argued deficiencies of Williams.

3

4   In the paragraph spanning pages 10 and 11 of the Third Office Action, the Examiner

5   further asserted the following:

6   Furthermore, Koehler teaches that in response to the scenario initiation, the business rules
7   application 232 receives input from the trainee at step s324. The trainee's input includes speaking
8   into the headset microphone or, alternatively, typing on a keyboard interfaced with the trainee
9   terminal 130. Note that the initial dialog segment of the scenario includes an incoming customer
10   call and the trainee's response, e.g., answering the call and greeting the customer. For example, the
11   software emulation 238 may provide an indication of a queued call that mimics the same
12   indication received by an agent at the actual call center, such as a beeping call initiation sound,
13   indicating that the scenario is ready. The trainee receives the call (e.g., by a particular keystroke,
14   as provided by the software emulation 238) and responds with a greeting (Koehler [0061]).
15
16   This passage describes the unremarkable (and related) concept that a trainee receives an audio input

17   (see paragraphs [0059]-[0060] of Koehler) and responds by speaking into a headset microphone.

18   Additionally, although the trainee may type on a keyboard, this typing is directed to the software

19   emulation 238, which is not related to the claimed invention, as discussed above. Thus, like the

20   Examiner's other cited passages, these teachings do not cure the argued deficiencies of Williams.

21

22   In the first full paragraph on page 11 of the Third Office Action, the Examiner presented the

23   following obviousness analysis:

24   Therefore, it would have been obvious to one of ordinary skill in the art at the time of the
25   invention to modify the system of Williams to incorporate deriving from the voice application a
26   nominal output of the voice application and processing the user simulation script to generate both
27   a simulated output for the voice application corresponding to the nominal output and a simulated
28   input deriving from the voice application a nominal output of the voice application **as taught by**
29   **Koehler** to allow for the mimicking or simulation of an interaction taking place within a call
30   center (Koehler [0061]), wherein the teachings Koehler can easily be applied to that of Williams to
31   provide simulated output (e.g. pop-up or text) that would be actual output (e.g. audio) during a
32   real-time call (Koehler [0049]). (emphasis added)
33
34   For reasons already alluded to above, the Examiner has mischaracterized the teachings of Koehler.

35   As previously discussed, Koehler is directed to a training tool for training call center agents based

1   on interaction with simulated customers. On one end of the "call" is a test script that generates

2   audio that the trainee hears and simulated output to a software emulator, and on the other end of the

3   call is the trainee and a software emulator that emulates the software in a calling center.

4

5   *Assuming arguendo* that the Examiner intends to assert that the script execution engine 58

6   that provides the audio telephone signals corresponds to a "voice application," only a single type of

7   output is obtained from the script execution engine. Specifically, an actual output (i.e., the audio

8   telephone signals). The claims, however, refer to two different types of outputs regarding the voice

9   application: (i) deriving a *nominal output* from the voice application and (ii) processing the user

10   simulation script to generate a *simulated output* for the voice application. Thus, Koehler fails to

11   teach the limitations for which Koehler is being relied upon to teach.

12

13   Additionally, as claimed, the user simulation script is processed to generate to a pre-

14   determined user input to the voice application. However, under the assumption that the script

15   execution engine 58 corresponds to the voice application, the input into the script execution

16   engine 58 is from the trainee and not based upon the text scripts. Thus, Koehler further fails to

17   teach the limitations for which Koehler is being relied upon to teach.

18

19   The Examiner's proposed rationale for the combination defies common sense. First, the

20   Examiner asserted that the combination would "allow for the mimicking or simulation of an

21   interaction taking place within a call center." However, this is already accomplished by

22   Williams (see Abstract: "a virtual telephone caller system is provided to test the IVR of a

23   contact center.") Since the problem has already been solved by Williams, one having ordinary

1   skill in the art would not have been realistically impelled to employ Koehler to solve this

2   problem. See Ex parte Rinkevich, Appeal 2007-1317 (non-precedential) ("we conclude that a

3   person of ordinary skill in the art *having common sense* at the time of the invention would not

4   have reasonably looked to Wu to solve a problem already solved by Savill") (emphasis in

5   original).

6

7   The Examiner's other assertion is that "the teachings Koehler can easily be applied to that

8   of Williams to provide simulated output (e.g. pop-up or text) that would be actual output (e.g.

9   audio) during a real-time call." The alleged simulated output (i.e., "pop-up or text") is what the

10   trainee receives. This is entirely different than providing a simulated input to a voice

11   application. Thus, the Examiner's proposed rationales are not reasonably related to the claimed

12   limitations at issue.

13

14   Conclusion

15   Based upon the foregoing, Appellants respectfully submit that the Examiner's rejection

16   under 35 U.S.C. § 103 based upon the applied prior art is not viable. Appellants, therefore,

17   respectfully solicit the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: December 14, 2009   Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. A computer-implemented method for simulating a run-time user interaction with a voice application, said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output of the voice application; and

processing the user simulation script to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input for the voice application corresponding to a pre-determined user input to the voice application.

8. A computer-readable medium having stored thereon a computer program for simulating a run-time user interaction with a voice application, said computer program comprising a routine set of instructions which when executed by a computer cause the computer to perform the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output of the voice application; and

processing the user simulation script to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input for the voice application corresponding to a pre-determined user input to the voice application.

15. A computer-implemented simulation tool system for simulating a run-time user interaction with a voice application running on an application server, said tool system being configured to load a user simulation script programmed to specify simulated voice interactions with the voice application, and comprising:

a voice application processing module to process the voice application to derive a nominal output of the voice application; and

a user simulation script processing module to process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output, and to generate a simulated input for the voice application corresponding to a pre-determined user input to the voice application.

21. The method of claim 1, wherein the user simulation script is specified in a customized mark-up language.

22. The method of claim 1, wherein the step of processing further comprises simulating a text equivalent and an execution time for each of the nominal output and the pre-determined user input.

23. The method of claim 1, wherein the simulated output simulates an output from a text to speech engine in response to the simulated input.

24. The method of claim 1, wherein the simulated output simulates an output from an automatic speech recognition engine in response to the simulated input.

25. The method of claim 1, wherein the simulated output simulates a pre-recorded audio source.

26. The method of claim 1, further comprising the steps of:

a) deriving additional nominal outputs of the voice application;

b) processing the user simulation script to generate additional simulated outputs for the voice application corresponding to the additional nominal outputs;

c) processing the user simulation script to generate additional simulated inputs to the voice application; and

d) repeating steps a), b) and c) until the user simulation script is exhausted to simulate a complete set of user interactions with the voice application, in response to and as input for a complete set of user prompts from the voice application.

27. The computer-readable medium of claim 8, wherein the user simulation script is specified in a customized mark-up language.

28. The computer-readable medium of claim 8, wherein the step of processing comprises simulating a text equivalent and an execution time for each of the nominal output and the pre-determined user input.

29. The computer-readable medium of claim 8, wherein the simulated output simulates an output from a text to speech engine in response to the simulated input.

30. The computer-readable medium of claim 8, wherein the simulated output simulates an output from an automatic speech recognition engine in response to the simulated input.

31. The computer-readable medium of claim 8, wherein the simulated output simulates a pre-recorded audio source.

32. The computer-readable medium of claim 8, further causing said computer to perform the steps of:

a) deriving additional nominal outputs of the voice application;

b) processing the user simulation script to generate additional simulated outputs for the voice application corresponding to the additional nominal outputs;

c) processing the user simulation script to generate additional simulated inputs to the voice application; and

d) repeating steps a), b) and c) until the user simulation script is exhausted to simulate a complete set of user interactions with the voice application, in response to and as input for a complete set of user prompts from the voice application.

33. The computer-implemented simulation tool system of claim 15, wherein the user simulation script is specified in a customized mark-up language.

34. The computer-implemented simulation tool system of claim 15, wherein the simulated output simulates a text equivalent and an execution time for the nominal output; and

wherein the simulated input simulates a text equivalent and an execution time for the pre-determined user input.

35. The computer-implemented simulation tool system of claim 15, wherein the simulated output simulates an output from a text to speech engine in response to the simulated input.

36. The computer-implemented simulation tool system of claim 15, wherein the simulated output simulates an output from an automatic speech recognition engine in response to the simulated input.

37. The computer-implemented simulation tool system of claim 15, wherein the simulated output simulates a pre-recorded audio source.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellants are unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.